



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

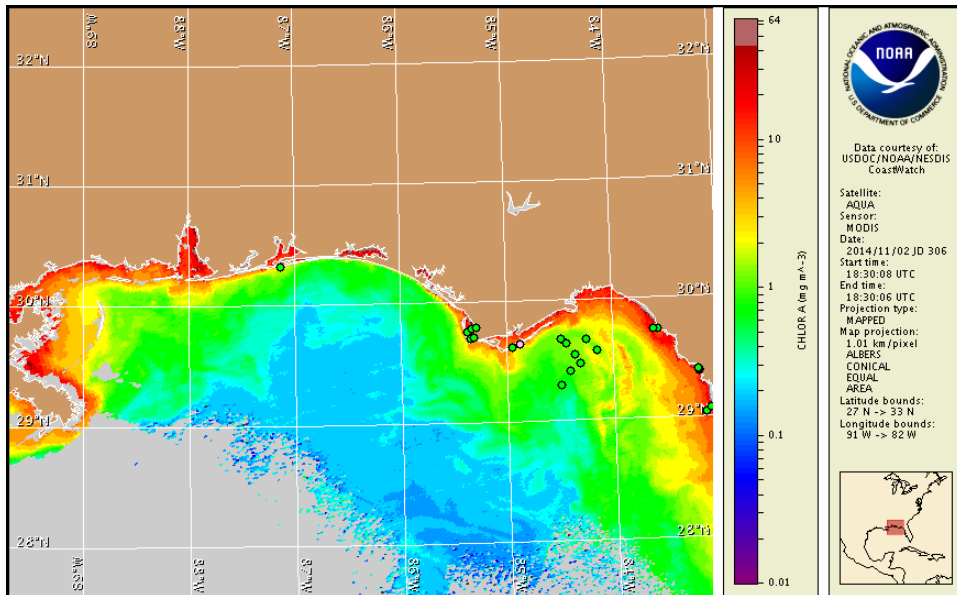
Monday, 03 November 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 30, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 24 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

*Karenia brevis* (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of northwest Florida from Escambia to Taylor counties. No respiratory irritation is expected Monday, November 3 through Thursday, November 6.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Visit <http://tidesandcurrents.noaa.gov/hab/#swfl> for the most recent southwest Florida conditions report.

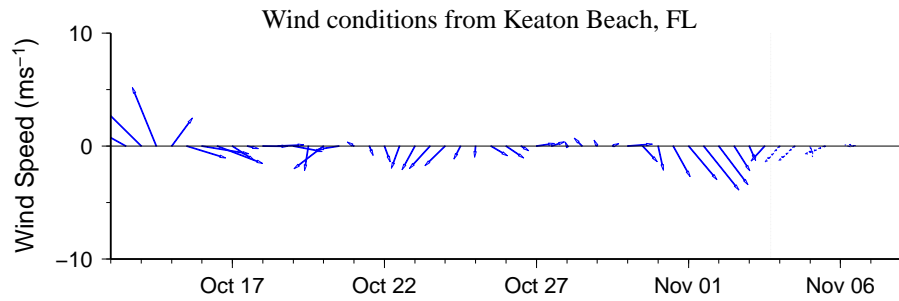
## Analysis

*Karenia brevis* (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of northwest Florida from Escambia to Taylor counties. A sampling transect offshore Franklin and Wakulla counties, within a region of anomalously high chlorophyll visible in MODIS Aqua imagery from 10/28-11/2, has indicated one background *K. brevis* concentration in a surface sample collected 24 miles southeast of Alligator Point, and has indicated *K. brevis* is not present in seven other surface and bottom samples collected between 10 and 34 miles offshore (FWRI; 10/29). Additional sampling over the past week alongshore Escambia County, indicated *K. brevis* is not present (FWRI; 10/28). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida over the past few days (MML; 10/30-11/3). A large fish kill was reported within St. Joseph Bay of Gulf County on 10/30 where FWRI sampling on 10/27 indicated *K. brevis* was not present (FWRI).

In recent MODIS Aqua imagery from 11/2 (shown left), patches of elevated to very high chlorophyll (2 to >20  $\mu\text{g/L}$ ) are visible along- and offshore northwest Florida from Gulf to Taylor counties. Anomalously high chlorophyll is visible alongshore from Franklin to Taylor County and extending up to 70 miles offshore. However, recent sampling in this region (described above) has indicated *K. brevis* ranges from not present to background concentrations. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to various algal species that have been reported throughout the region as well as the resuspension of benthic chlorophyll and sediments along the coast.

Observed winds over the past several days may have promoted southerly transport of surface *K. brevis* concentrations offshore northwest Florida. East to southeast winds forecasted today through Wednesday may promote northerly transport of surface *K. brevis* concentrations.

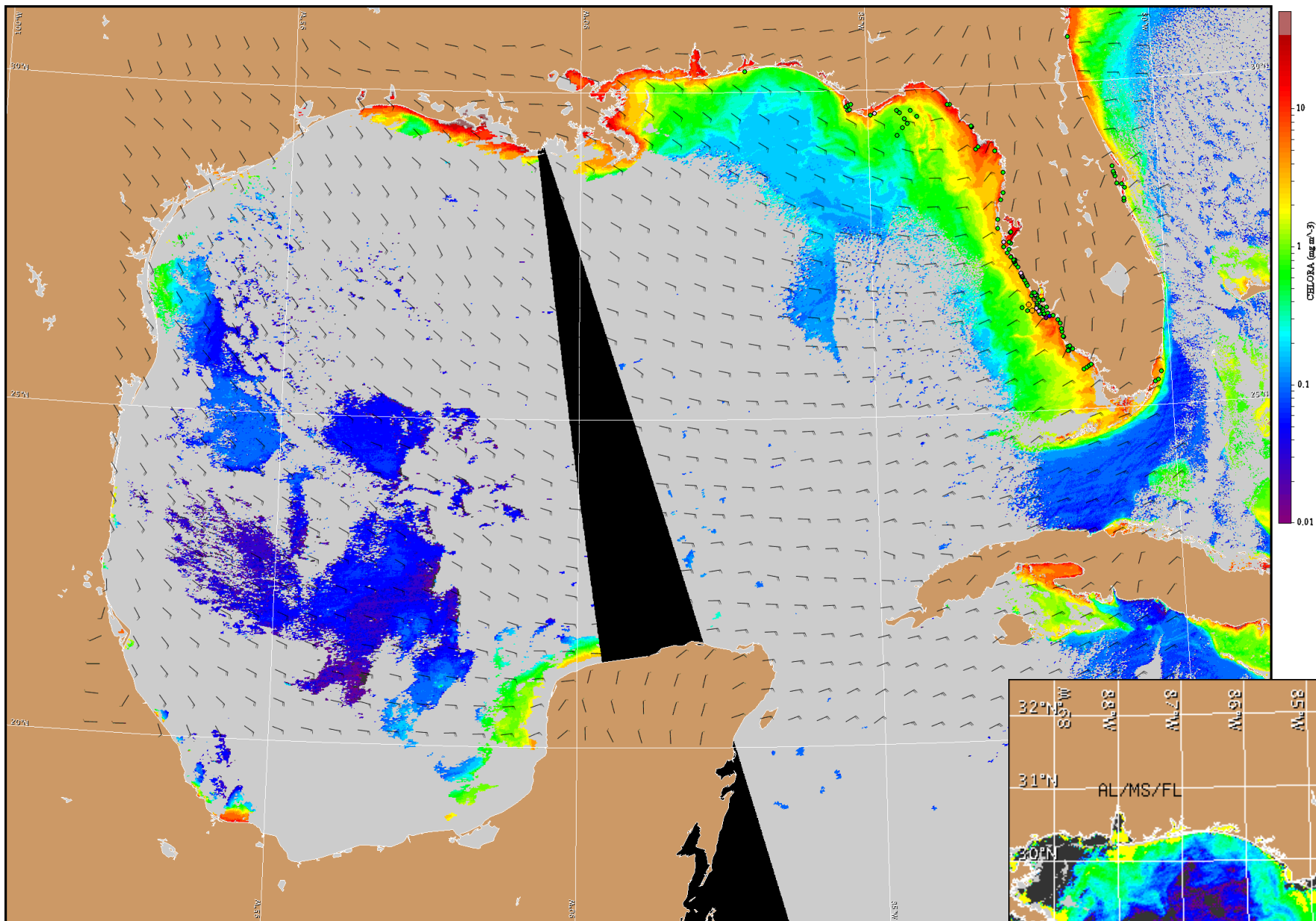
Davis, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

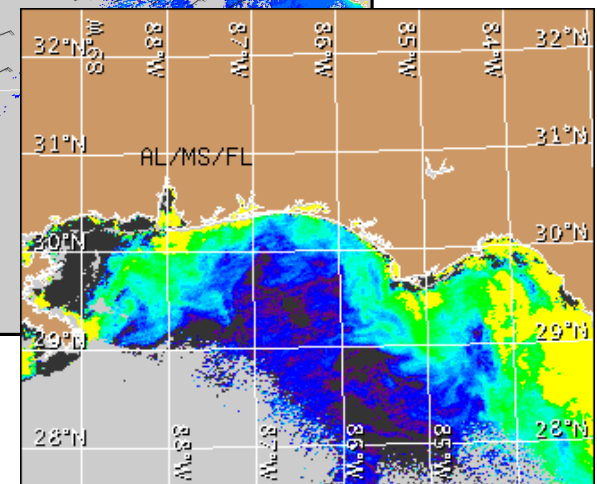
## Wind Analysis

**Escambia to Taylor counties:** East winds (10-20kn, 5-10m/s) this afternoon through Tuesday night. Southeast winds (5-15kn, 3-8m/s) Wednesday. South winds (5-10kn, 3-5m/s) Thursday becoming west winds (10kn, 5m/s) in the afternoon. Northwest winds (20kn, 10m/s) Thursday night.



Satellite chlorophyll image and forecast winds for November 4, 2014 12Z with points representing cell concentration sampling data from October 24 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).